

THIS MONTH

Last month, we reviewed Intel's new Core 2 Duo processor (the E6750), which was quicker and, incredibly, cheaper than its rival. This month, we've got an even bigger bargain: Intel's Pentium Dual Core E2140. This budget processor uses the same Core technology as the speedier processors and it can be overclocked beyond belief. To see just how astounding this processor is, read our review on page 50.

If you fancy a powerful notebook that you can carry around all day, read our review of Toshiba's Portégé R500-106 (right). It's the world's smallest and lightest notebook, so you won't even notice you're carrying it around. Even better, it's quite reasonably priced and doesn't carry the high price that you'd normal expect from an ultra-portable.

Having an internet connection isn't often a case of want: it's often a necessity. If you've got a business where losing your connection isn't an option, we've got a product that can help. Billion's BiPAC 7300GX, which is reviewed on page 46, is a standard ADSL wireless router but also takes a CardBus 3G adaptor, so you can use wireless broadband if your main connection fails.

David Ludlow
Deputy Editor

david@computershopper.co.uk



TOSHIBA

Portégé R500-106

★★★★★

£1,196 inc VAT

If you need to carry a notebook everywhere you go then Toshiba's Portégé R500-106 will certainly be of interest to you. Billed as the world's smallest and thinnest notebook, it weighs just 1kg and measures 26mm at its thickest point, down to 20mm at its thinnest. Surprisingly, Toshiba has managed to fit a DVD writer, so you don't need to carry an external drive when you travel.

The chassis feels fairly rigid despite its compact dimensions. The plastic casing creaks a little when you pick up the notebook, though. More concerning is the way the lid flexes alarmingly under pressure. It doesn't fold flat either, stopping at around 45°. This can be annoying if you are sitting somewhere cramped with the notebook on your lap, like on a plane, as it becomes hard to get a clear view of the display due to the tight viewing angles.

Those tight angles are probably due to the use of a trans-reflective display. A reflective layer built into the screen lets it use light from external sources such as the sun. The backlight is made up of LEDs and is controlled automatically to make up for any shortfall in reflected light. Consequently, the display is working with the external light sources rather than trying to outshine them. The effect can be varied across the screen, so shadows that are cast partially across the display are compensated for automatically. It's a subtle but impressive technology, and it helps when you're working on the move.

The keyboard takes up almost the full width of the chassis, so there's plenty of space and no annoyingly small keys. The action is excellent, with fair depth of travel and good feedback. It's also spill-resistant, so you don't have to worry about a single cup of coffee destroying your notebook. The touch pad is big and accurate,

This month What's New Contents



PC Systems & Notebooks page 20

Fujitsu Siemens Esprimo E3500	★★
Lenovo ThinkPad X60s	★★★★★
PC Nextday Zoostorm Z-3413 Versatile	★★★★★
PC Nextday Zoostorm S2-4201	★★★★★
PC Specialist Apollo 850GTS	★★★★
RL Supplies Modula 4400 OC	★★★★★
Samsung Q45	★★★★★
Toshiba A200-1AB	★★★★★
Toshiba Portégé R500-106	★★★★★

Handhelds page 30

Archos 404 Camcorder	★★★★
Archos 605 WiFi	★★★★
HTC Touch	★★★★
Nokia E65	★★★★★
TomTom Go 720	★★★★★
TomTom One Regional	★★★★★

Printers & Scanners page 32

Brother DCP-540CN	★★
Canon PIXMA iP4300	★★★★★
Canon PIXMA MP160	★★★★★
Canon PIXMA MP510	★★★★★
Epson Stylus DX4400	★★
Epson Perfection V100 Photo	★★★★★
HP Photosmart D7160	★★★★★
Konica Minolta Magicolor 2500W	★★★★
Samsung CLX-2160N	★★★
Samsung ML-2510	★★★★★

Displays page 36

Dell 1800MP	★★★★★
HannsG HW223DP	★★★★★
Hitachi Illumina PJ-TX300	★★★★★
Iiyama E1900S	★★★★★
Mirai DML-S19W100	★★★★★
Mitsubishi WL639U	★★★★
Samsung SyncMaster 245B	★★★★★
Viewsonic PJ503D	★★★★

Photography page 38

Canon EOS 400D	★★★★★
Canon PowerShot A570 IS	★★★★★
Canon PowerShot A630	★★★★★
Fujifilm FinePix F20	★★★★★
Kodak EasyShare Z1275	★★★
Panasonic Lumix DMC-FX100	★★★
Panasonic Lumix DMC-FZ50	★★★★★
Panasonic Lumix DMC-TZ2	★★★★★
Pentax K10D	★★★★★

Video page 42

Canon HV20	★★★★★
Canon MD101	★★★★★
JVC Everio GZ-HD7	★★★
Panasonic SDR-S10	★★★★
Sling Media Slingbox	★★★★★
Top Up TV TUTV Anytime DTR	★★★★★



although its small buttons feel cheap. Between these is a fingerprint reader, so you can secure sensitive files without the constant hassle of entering passwords.

A 120GB hard disk provides a generous amount of storage and it has shock-protection to safeguard your data. This notebook has an optical drive, too, so making backups isn't a problem, and you can even watch DVDs on the train. As well as the optical drive, there are plenty of ports around the Portégé R500-106's edges, with three USB2 ports, FireWire and an SD card reader.

There's no space for a CardBus or ExpressCard expansion slot, which might be an issue for some users as there's no built-in 3G. Fortunately, Vodafone is now selling a USB 3G modem that would be compatible, if not as neat. The built-in wireless adaptor supports the latest Draft-N standard for quick wireless access.

The Portégé R500-106 uses an ultra-low voltage processor that runs only at 1.2GHz. It is dual core, though, so it's fast enough to deal with Windows plus multiple office applications. Battery life was respectable at nearly four-and-a-half hours, although we were

hoping for a little more given the processor's low power usage. You'll need to carry a second battery with you to get a full working day from it.

The R500-106 is ideal for computing on the move in style. Your shoulder will quickly appreciate its low weight and you won't need that big notebook bag anymore. If you want an optical drive and widescreen display in a tiny notebook, this is the perfect choice, plus it's very fairly priced. It's quicker, lighter and has a better battery life than our previous favourite, the ThinkPad X60s.

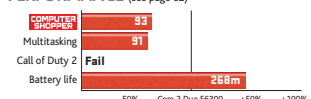
Seth Barton

SUMMARY

- ✓ Very light and slim
- ✓ Built-in DVD writer
- ✗ No built-in 3G or PC card slots

ULTRA-PORTABLE NOTEBOOK 1.2GHz Intel Core 2 Duo U7600, 1GB RAM, 120GB hard disk, Intel GMA 950 graphics, DVD+/-RW +/-DL drive, 12.1in LCD widescreen, 1kg
PART CODE PPR50E-00L00JEN
SUPPLIER www.cclonline.com
DETAILS www.toshiba.co.uk

PERFORMANCE (see page 62)



PC SYSTEMS & NOTEBOOKS

FAQ

Q I've heard that Evesham Technology has gone out of business. Does this mean that the warranty for my Evesham computer is now worthless?

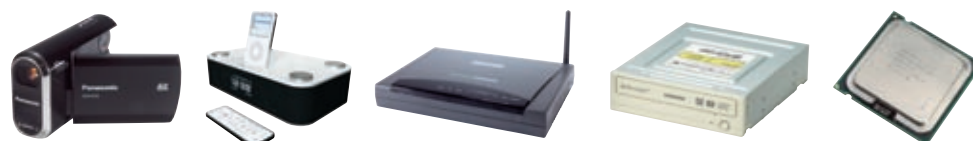
A While it's true Evesham has experienced financial difficulties and has made redundancies, it has not gone out of business. The Evesham brand is now owned by Geemore Technology, which is continuing to sell Evesham-branded desktop PCs, notebooks and other products. It has also promised to honour all existing Evesham warranties, so you should be able to get service and support.

Geemore Technology was established by some of the founders of now-defunct computer manufacturers Tiny and Time Computers. For more information, see our News article on page 11.

Alan Lu
PC systems and storage expert



alan@computershopper.co.uk



Audio page 44

Behringer Podcastudio USB	★★★★
iRhythms A-211	★★★★★
Logitech AudioStation	★★★★★
Logitech X-230	★★★★★
Logitech Z-5450	★★★★★
Maxell HP-NC22	★★★★★
Philips SLA5520	★★★★★
Scandyna Micropod SE Active	★★★★★
XtremeMac Luna	★★★★

Networks page 46

Billion BiPAC 7300GX	★★★★★
Buffalo WBM-R-G125	★★★★★
Devolo dLAN Wireless Extender Starter Kit	★★
Gradwell Centrex UK Unlimited	★★★★★
ZyXel HomePlug AV PLA-400	★★★

Storage page 48

Akasa Integral P2 E-SATA	★★★★★
Antec Veris MX-1	★★★★★
Buffalo DriveStation Combo 500GB	★★★★★
LG GSA-H55N	★★★★★
Pioneer DVR-112	★★★★
Samsung SpinPoint T166-HD501LJ	★★★★★
Samsung Super WriteMaster SH-S203	★★★★★
Seagate Barracuda 7200.10 Ultra ATA/100 500-GB Hard Drive	★★★★★

Components page 50

EVGA 8800GTS ACS3	★★★★★
Intel Core 2 Duo E6700	★★★★★
Intel Core 2 Duo E6750	★★★★★
Intel Pentium Dual Core E2140	★★★★★
Lego Mindstorms NXT	★★★★★
PNY GeForce 8400 GS	★★
Sapphire X1950 Pro	★★★★★
Shuttle XPC SD32G2	★★★★★
Shuttle XPC SG33G5	★★★

Software & Games page 54

Acronis True Image 10 Home	★★★★★
Adobe Creative Suite 3 Design Premium	★★★★★
Adobe Photoshop Lightroom 1.0	★★★★★
BT Digital Vault	★★★
Cakewalk Studio Instruments	★★★★
Calkwalk Sonar Home Studio 6 XL	★★★★
Civilization IV: Beyond the Sword	★★★★
Colin McRae: DiRT	★★★★★
Company of Heroes	★★★★★
FIFA 2007	★★★★★
Lord of the Rings: Shadows of Angmar	★★★★★
Mackie Traktion 3 Ultimate Bundle	★★★
Mackie Traktion 3 Project Bundle	★★★★★
OpenOffice OpenOffice.org 2.1	★★★★★
Overlord	★★★★★
Roxio Easy Media Creator 9 Suite	★★★★★
Sibelius Software Sibelius 5	★★★★★
Steganos AntiVirus 2007	★★★★★
Steganos OnlineSafe	★★★★★
Supreme Commander	★★★★★
The Sims: Pet Stories	★★★
Tom Clancy's Ghost Recon Advanced Warfighter 2	★★★★★

BYTE SIZE

MONSTER GameLink Xbox 360 VGA

★★

£45 inc VAT



Monster's GameLink Xbox 360 VGA cable is a high-quality cable that lets you connect your Xbox 360 to a monitor or LCD TV. It has stereo phono connectors to deliver sound. You can buy a mini-jack-to-optical cable if you want to use a decoder for surround sound.

The cable has a life-time guarantee. Sound and audio quality were excellent, but we struggled to see the difference between this and the official Microsoft Xbox 360 VGA cable.

Considering Microsoft's cable also has an optical output as standard, Monster's cable seems expensive. It is recommended only for those who must have the best-quality connectors.

David Ludlow

SUPPLIER www.tvcables.co.uk
DETAILS www.monstercables.com

TRENDNET TVP-SP4BK

★★★★★

£93 inc VAT



TrendNet's TVP-SP4BK is a portable voice conferencing system for use with Skype. It connects to a PC via the bundled Bluetooth adaptor. There's currently no Vista support for the utility software, so you must install it on a Windows 2000 or XP PC.

The TVP-SP4BK is battery powered and can be recharged via the provided USB cable. The battery gives 72 hours on standby and four hours of talk time, so it's fine for most meetings. Dialling a number is easy; use the LCD to choose a Skype contact or dial directly using the keypad. The phone supports all Skype's features, including conference calls.

Sound quality is excellent, and the microphone picked up speech clearly even a couple of metres away. It is good value if you make conference calls, but a power supply and Vista support would make it better.

David Ludlow

SUPPLIER www.expansys.com
DETAILS www.trendnet.com

SAMSUNG Q45

★★★★★

£799 inc VAT



This month's notebook Labs features nine notebooks costing £750 including VAT. Samsung's Q45 costs just £50 more than that, but it's an ultra-portable and is very different to our Labs winner, the Dell Inspiron 1520 (see our round-up of £750 notebooks on page 74 for details). If you need a notebook you can carry around all day, this is a better choice.

The all-black colour scheme gives the Q45 a sturdy business-like feel and this is borne out by a rigid chassis. It doesn't flex under stress, so it should be able to take a few knocks, and given that it is only 1.9kg you'll be able to take it with you wherever you go. It'll easily slip into a briefcase or satchel thanks to its small dimensions; however, the large battery extends an extra 19mm at the back.

The big 4,800mAh battery pack lasted for an impressive four hours and nine minutes in our light usage test. This is an impressive score and makes the Q45 suitable for all-day use as a mobile computer. Buy a second battery, and you could get a full working day out of the pair. The supplied battery has a handy built-in charge indicator, too, so you'll always know how much charge any spare batteries contain.

There are only two USB ports on this notebook. A memory card reader is also provided with support for SD, MS and xD cards, while a FireWire port sits alongside the CardBus expansion slot. Inside the chassis, there's a 160GB hard disk, so there's plenty of space for storing your files.

The 12.1in display has the same 1,280x800 pixel resolution as most 15.4in displays. The smaller size



can make everything seem a bit cramped and you'll need to increase text size to make it easily legible. Samsung has used a gloss finish on the display, which isn't the best choice for use on the move, because it exaggerates reflections on the screen from bright light sources.

The keyboard is a joy to use. It has a firm base, so the keyboard doesn't flex when you type. The keys provide clear feedback when pressed. Samsung has also done a good job with the layout. All the vital keys were easily big enough for our fingers.

The Q45 has an Intel Core 2 Duo T7100 processor.

With 2GB of RAM, it is capable of accomplishing any task you would want to undertake on such a small display. Unlike our Labs winner from Dell, however, the Q45 has no dedicated graphics chipset and isn't suitable for playing 3D games.

If you're looking for a smart and compact notebook for use on the move, but don't want to spend a fortune, Samsung's Q45 is an excellent choice. However, if you want a big screen for enjoying videos, DVD and photos, or you want to play games, you're better off with Dell's Inspiron 1520.

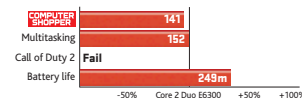
Seth Barton

SUMMARY

- ✓ Good battery life
- ✓ Cheap for an ultra-portable
- ✗ Gloss display

ULTRA-PORTABLE NOTEBOOK PC 1.8GHz
Intel Core 2 Duo T7100, 2GB RAM, 160GB
hard disk, Intel GMA 950 graphics, DVD
+/-RW +/-DL drive, 12.1in LCD
widescreen, 1.9kg
PART CODE PSAE0E-01U00EEN
SUPPLIER www.gultronics.co.uk
DETAILS www.toshiba.co.uk

PERFORMANCE (see page 62)



Also consider...

PC NEXTDAY Zoostorm 52-4201

★★★★★

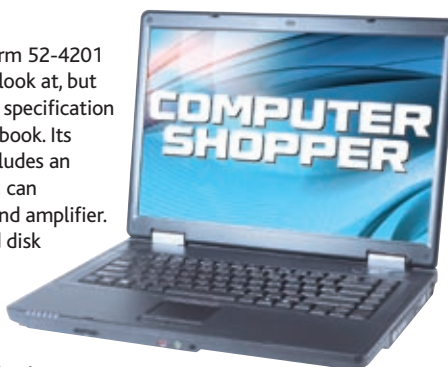
£486 inc VAT



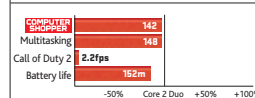
PC Nextday's Zoostorm 52-4201 may not be much to look at, but it has an outstanding specification for such an inexpensive notebook. Its decent selection of ports includes an optical S/PDIF output, so you can connect it to a surround-sound amplifier.

The spacious 160GB hard disk provides plenty of room to hoard media files. The built-in speakers are poor, however, and the sound is tinny and distorted. The display has a matt anti-glare finish but it isn't very bright and white areas have a blueish tinge.

The Zoostorm's Core 2 Duo chip produced an impressive overall score in our application benchmarks. The GMA X3100 graphics chipset is unable to run modern games, though. The battery lasted a



NOTEBOOK PC Intel Core 2 Duo
T7100, 1GB RAM, 160GB hard disk,
Intel GMA X3100 graphics, DVD
+/-RW +/-DL, 15.4in widescreen
LCD, 2.7kg PART CODE 3352-4201
SUPPLIER www.pcnextday.co.uk
DETAILS www.pcnextday.co.uk
✓ Fast in applications; big hard disk
✗ Display could be brighter
FULL REVIEW Oct 2007



reasonable two-and-a-half hours in our test. It'll suffice for use around the house, but not for regular mobile use.

It may not look exciting, but the Zoostorm 52-4201 is a powerful notebook at a low price.

TOSHIBA A200-1AB

★★★★★

£470 inc VAT

Toshiba is hardly shy about this notebook's origins. The glossy black lid has the manufacturer's name embossed across it in big silver letters. Opening the notebook, we noticed that the lid's hinges aren't very stiff. Whenever you adjust the screen's position, it wobbles back and forth for a few seconds before settling. This could be a pain if you need to use the notebook on a bumpy train or plane ride.

The display is good, certainly better than the one used on PC Nextday's Zoostorm 52-4201 (see 'Also consider...' below). It's a little brighter and the gloss finish makes colours look richer and blacks inkier. However, it also means you'll suffer reflections from strong light sources.

Between the display and the keyboard are two clear plastic speaker ports. These look stylish and the speakers sound amazingly good for a notebook. They won't blow you away with volume, but for watching downloaded video clips or browsing your MP3s to burn a compilation disc they are more than capable.

The speakers are controlled by a dedicated volume dial on the front of the chassis. It's a feature Toshiba often includes; we wish more manufacturers would do the same. A memory card reader supports all the main formats except for CompactFlash. Alongside that is a switch for disabling the built-in wireless, which is cleverly tucked away to stop you switching it off accidentally. The edges of the chassis have all the other ports we'd expect, with four USB2 ports, FireWire and an S-video output.

At first, we weren't that impressed by the keyboard, as it flexes a little when you type heavily and the Return key is a little small.



However, we did warm to it because the keys have a good depth of travel and springy feedback. We had no similar reservations about the touch pad. It's big, accurate and has a smooth finish.

The 80GB hard disk is disappointing, only half the size of the Zoostorm's. It still provides plenty of storage for most users, but if you hoard music or video clips on your notebook, it will fill up quickly.

It's not the fastest notebook we've seen for this price, but it's quick. The Intel Core 2 Duo processor and 1GB of RAM will speed through all but the hardest of tasks. Even some simple video editing is easy with this notebook, although more complex jobs may benefit from more memory. Unfortunately, both memory slots are full, so you'll have to discard the current memory to upgrade.

The battery lasted for two-and-a-half hours. This is enough for occasional use away from the mains, either around the house or in a meeting room, but it's not sufficient for regular mobile use.

This great notebook is only let down by a wobbly lid and small hard disk. It's a good alternative to PC Nextday's Zoostorm 52-4201 if you want a better-looking notebook with decent speakers for the home.

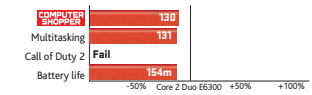
Seth Barton

SUMMARY

- ✓ Great speakers
- ✓ Plenty of ports
- ✗ Wobbly lid and small hard disk

NOTEBOOK PC 1.73GHz Intel Core 2 Duo T5300, 1GB RAM, 80GB hard disk, Intel GMA 950 graphics, DVD+/-RW +/-DL drive, 15.4in LCD widescreen, 3.1kg
PART CODE PSAE0E-01U00EEN
SUPPLIER www.gultronics.co.uk
DETAILS www.toshiba.co.uk

PERFORMANCE (see page 62)



LENOVO ThinkPad X60s

★★★★★

£1,179 inc VAT

BEST BUY This ThinkPad's black chassis is light, slender and looks business-like. Despite being small and slim, though, it's very sturdy and should take a few knocks. The display has an anti-glare finish so you can work in most lighting conditions. Lenovo has included a built-in a 3G data card for fast mobile internet; however, you will need a monthly contract from a network provider.

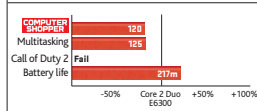
It did surprisingly well in our benchmarks despite its low-voltage processor, and the small battery lasted for half a working day in our light usage test. If you need a longer battery life then Lenovo has a range of larger alternatives.



ULTRA-PORTABLE NOTEBOOK

Intel Core Duo L2400, 1GB RAM, 80GB disk, Intel Graphics Media Accelerator 950 graphics, no optical drive, 12.1in LCD, 1.3kg
SUPPLIER www.laptopsdirect.co.uk
DETAILS www.lenovo.co.uk
PART CODE UK16DUK

✓ Lightweight; built-in 3G ✗ No optical drive FULL REVIEW Jul 2007



The keyboard is great for typing documents on the move, and there's a fingerprint reader for security. If you need an ultra-portable notebook for office work, this is the best choice.

BYTE SIZE

STREET MOUSE TVR Tuscan Silver

★★★★

£13 inc VAT



The TVR Tuscan Silver is the second car-shaped mouse we've received. It's shaped like TVR's powerful Tuscan, and our model was finished in a shade of metallic silver.

This mouse is a no-frills model, with two buttons and a scroll wheel. There are no buttons to step forwards and backwards through webpages, but we find that these buttons can sometimes be more of a curse than a blessing.

The mouse isn't an especially ergonomic shape, so it isn't comfortable to hold for long periods. However, it has smooth pointer movement and is accurate. It wouldn't work on a desk surface, though, so you'll need a mouse mat.

The TVR Tuscan Silver is an inexpensive and fun mouse.

Chris Finnamore

SUPPLIER www.amazon.co.uk
DETAILS www.amazon.co.uk

SANDISK Cruzer Micro 4GB

★★★★

£22 INC VAT



SanDisk's Cruzer Micro USB flash drive can be used to store and run specially modified U3 programs such as Skype or OpenOffice on any PC without installing any software on that computer.

The 4GB Cruzer Micro is the largest capacity U3 flash drive we've seen, and should provide enough space for plenty of applications as well as your own data. The USB connector neatly slides in and out of the main body, protecting it from dust.

The Cruzer Micro was fairly fast copying large files, but it was, as expected, very slow at writing small files. The U3 capability is useful, but similar functionality can be added to faster portable storage devices using free software from <http://portableapps.com>.

Alan Lu

SUPPLIER www.memorymegastore.com
DETAILS www.sandisk.com

BYTE SIZE

EZVISION Video iWear

★
£150 inc VAT



EzVision claims its Video iWear glasses let you experience a virtual 50in display, no matter where you are.

The glasses plug into your video MP3 player or any device with a composite output, such as a DVD player. Apparently, twin LCD screens take advantage of stereoscopic vision, fooling you into thinking you're watching a 50in screen from 8½ feet away. However, it doesn't quite work like that.

To see the screens, you have to wear the glasses half-way down your nose, which is uncomfortable. The screens have a small 320x240 pixel resolution, colours are blurred and images indistinct.

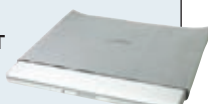
Unfortunately, the Video iWear glasses are expensive, uncomfortable, and will give you a splitting headache.

Chris Fynamore

SUPPLIER shop.ipodworld.co.uk
DETAILS www.ezgear4u.com

SONNET 2Fit Sleeve for MacBook Pro

★★
£27 inc VAT



The 2Fit is a notebook sleeve designed for 15in Apple MacBook Pro and PowerBook G4 notebooks. Notebook sleeves are usually designed to protect a notebook so you can carry it over short distances or in an ordinary bag instead of a computer case.

Unfortunately, while the 2Fit Sleeve for MacBook Pro will provide protection from scratches and scuffs, it has no padding to protect against drops and bumps. We would have liked to see a flap to protect a notebook from falling out and spillages. A useful combination screen cloth and keyboard cover is included.

Sadly, the 2Fit costs as much as some notebook bags but provides little protection, so we cannot recommend it.

Alan Lu

SUPPLIER www.macheaven.co.uk
DETAILS www.sonnetch.com

PC SPECIALIST Apollo 850GTS

★★★★★
£1,249 inc VAT

PC Specialist's Apollo 850GTS is the first computer we've seen to come equipped with one of Intel's latest Core 2 Duo processors, the E6850. With 2GB of RAM, the Apollo can handle the most Herculean of computing tasks. It performed very well in our video-encoding test, managing a score of 316. In our image-editing test it managed a score of 241.

You can record your favourite TV shows using the PCI hybrid TV tuner, but there's no remote control. At least you won't run out of hard disk space to store all your programs; the Apollo 850GTS has two 250GB hard disks. By default, one is used to store Windows and your applications, while the other holds your media library. You can configure them as a RAID 0 or 1 array instead if you wish.

PC Specialist has supplied an Acer 22in widescreen display. Its large 1,680x1,050 pixel resolution is ideal for working on two documents side by side, but it's flawed when attempting colour-sensitive work such as image manipulation. While it displayed most colours brightly and evenly, large areas of white looked greyish and there was noticeable coarseness and speckling in both our greyscale and colour transitions. It's more than adequate for watching movies, though.

Gamers will be able to play the latest games with high levels of graphical detail enabled, as the results of our 3D benchmarks show, thanks to the GeForce 8800GTS graphics card. If you want faster 3D performance in future, you can add



another Nvidia graphics card in SLI mode. However, due to the tight spacing of the PCI slots, you must sacrifice the TV tuner or the wireless networking card to fit a double-slot card such as another 8800GTS. The cramped interior of the case can also get in the way if you want to add more hard disks, as both of the empty 3½in drive bays are tricky to access.

Gamers and movie fans will appreciate the loud 5.1 Creative T6100 speakers, but they aren't well suited for listening to music. Although they have a lot of bass, they sound woolly and muffled. The cordless Logitech keyboard and mouse are adequate for everyday use, but gamers will want a more responsive USB set.

This is a generously specified PC, but you should consider whether you'll need all its extras, such as the TV tuner and wireless networking, before parting with your cash. If you don't need those extras then RL Supplies' Modula 4400 OC (see 'Also consider...' below), is even faster in games and much cheaper.

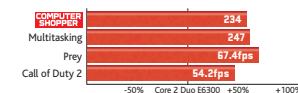
Alan Lu

SUMMARY

- ✓ Generous specification
- ✓ High-resolution monitor
- ✗ Cramped case interior

DESKTOP PC 3GHz Intel Core 2 Duo E6850, 2GB RAM, 2x 250GB hard disk, 320MB Nvidia GeForce 8800GTS graphics, DVD+/-RW +/-DL, 22in widescreen LCD, hybrid TV tuner
SUPPLIER PC Specialist 0844 499 4000
DETAILS www.pcspecialist.co.uk

PERFORMANCE (see page 62)



Also consider...

PC NEXTDAY Zoostorm 2-3413 Versatile

★★★★★
£440 inc VAT

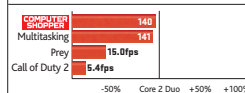
PC Nextday's Zoostorm 2-3413 Versatile is a budget PC keenly priced at less than £500. The Pentium Dual Core processor, despite its name, is actually related to the Core 2 Duo chips. With 1GB of RAM, the PC did surprisingly well in our benchmarks.

Keen gamers will be disappointed by the results of our 3D gaming benchmarks. You can replace the GeForce 8500GT with a more powerful card, but it's quick enough for older games and doesn't share system memory like an integrated graphics chip.

The computer's 19in widescreen monitor has a resolution of 1,440x900 pixels, which is ideal for



DESKTOP PC 1.8GHz Intel Pentium Dual Core E2160, 1GB RAM, 250GB hard disk, 256MB Nvidia GeForce 8500GT, DVD +/-RW +/-DL, 19in widescreen LCD PART CODE 3362-3413
SUPPLIER www.pcnextday.co.uk
DETAILS www.pcnextday.co.uk
✓ Speedy Windows performance; inexpensive ✗ Noisy
FULL REVIEW Sep 2007



watching DVDs or comparing documents side-by-side. However, it is not well suited for colour-sensitive image manipulation.

There are plenty of internal expansion options. It's distractingly noisy, though. Still, if you can tolerate the racket and don't need to play the latest games, this is an inexpensive PC that's fast in Windows.

FUJITSU SIEMENS Esprimo E3500

★★

£410 inc VAT

If you don't have much to spend on a PC, it's even more important to choose a computer that can be easily upgraded so that it doesn't lose its usefulness over time and as your computing activities become more complex. Unfortunately, while Fujitsu Siemens' Esprimo E3500 is a capable budget PC, it's tricky to upgrade.

The Esprimo E3500 is compact and could easily fit in a granny trolley. It's quiet, too, so it won't cause a racket while you're working. It doesn't come with a monitor, but a keyboard and mouse are included. However, the mouse uses an antiquated and inaccurate ball mechanism, while the keyboard feels springy, making long bouts of typing tiresome. Both will need to be upgraded if you want to use this PC comfortably.

The Esprimo E3500 uses Intel's older dual core processor, the Pentium D 925, instead of a newer Core Duo or Core 2 Duo, but it's fast enough for most tasks. It managed a very respectable 192 in our video-encoding test. As expected, it is no use for playing modern 3D games. The integrated Intel graphics chip couldn't run our Call of Duty 2 test and did poorly in our Prey benchmark. Older games should work fine, though, although you'll probably have to play them at low resolution and detail settings.

A PCI Express x16 graphics card can be fitted, but the half-height slot limits your choice of upgrades. There are also two half-height PCI slots for adding peripherals such as wireless networking or TV tuner cards. The 160GB SATA hard disk is mounted in a removable cage and can be replaced with a bigger disk if it's too small for your needs.



While there is an external 3½in bay for adding a memory card reader or another hard disk, it's very difficult to reach. Both it and the two empty RAM slots are blocked off by the cage holding the power supply and DVD writer, which are incredibly difficult to move out of the way. Installing extra RAM or another hard disk will be very difficult.

Unusually, the Esprimo E3500 comes with Windows XP Professional Edition installed rather than Windows Vista. Windows XP Professional Edition has some advantages over Vista Home Basic and Vista Home Premium, including support for Remote Desktop so that you can control another Windows PC over your network.

The Esprimo E3500 is a disappointing computer that's difficult to recommend. Although it's quiet and quick in Windows, it's tricky to upgrade. It would be ideal as a business PC if you happen to need Windows XP rather than Vista, but if you don't there are better-value systems available, such as PC Nextday's Zoostorm 2-3413 Versatile PC, for example; see 'Also consider...' below for details.

Alan Lu

SUMMARY

- ✓ Quiet
- ✗ Better-value systems available
- ✗ Difficult to upgrade

DESKTOP PC 3 GHz Intel Pentium D 925, 1GB RAM, 160GB hard disk, integrated Intel GMA 950 graphics, DVD+/-RW +/-DL
PART CODE BPJ:114SV101-LPS03
SUPPLIER www.fujitsu-siemens-shop.co.uk
DETAILS www.fujitsu-siemens.co.uk

PERFORMANCE (see page 62)

COMPUTER SHOPPER	141
Multitasking	151
Prey	3.5fps
Call of Duty 2	Fail

-50% Core 2 Duo E6300 +50% +100%

BYTE SIZE

BELKIN USB 2.0 7-Port Hub

★★★★★

£21 inc VAT



BEST BUY If you have lots of USB devices and only a few ports, a USB hub will save the time spent plugging and unplugging devices. A seven-port hub like this should be enough for even hardened gadget addicts.

The USB 2.0 7-Port Hub is fairly compact and the LEDs on the front tell you which ports are connected. Five ports are tucked away on the back, while the two on the top are ideal for memory sticks or wireless adaptors. If you need more ports, you can stack a second identical hub on top. The hub partitions off 12Mbit/s for every USB 1.1 device attached, so that all the bandwidth isn't hogged by one USB2 device.

This is clever, well designed and reasonably priced.

Seth Barton

SUPPLIER www.dabs.com
DETAILS www.belkin.com

SANDISK Ultra II 4GB SDHC Memory Card

★★★★★

£30 inc VAT



SDHC memory cards look identical to normal SD cards. However, to use them you'll need a device that supports the new standard, such as Panasonic's SDR-S10, which is reviewed on page 42. While standard SD cards are generally limited to 2GB, SDHC cards are now available in both 4GB and 8GB capacities.

This card did fairly well in our speed tests, with a 7.9MB/s write speed and a 9.4MB/s read speed. This is similar to the faster SD cards we've seen in the past. Cheaper unbranded SDHC card are available, but this one comes with a 10-year guarantee and a USB memory card reader, which is essential if your PC doesn't have a SDHC compatible slot.

Seth Barton

SUPPLIER www.mouse2house.co.uk
DETAILS www.sandisk.com

RL SUPPLIES Modula 4400 OC

★★★★★

£800 inc VAT

BEST BUY If you're looking for a cheap gaming PC, RL Supplies' Modula 4400 OC could be just what you want. It comes with a large 22in widescreen monitor, which is the perfect size for playing the latest games.

It didn't do so well in our demanding image tests, however, so you'll need a better-quality monitor for tasks such as image-editing work.

The GeForce 8800GTS graphics card is superb and handles all today's games at high resolutions and detail settings. It's DirectX 10-compatible, too, so you'll be able to play newer games that require this technology when they become available. It achieved



DESKTOP PC Intel Core 2 Duo E4400, 2GB RAM, 320GB hard disk, 640MB BFG Nvidia GeForce 8800GTS, DVD+/-RW +/-DL, 22in widescreen LCD
PART CODE Modula 400 OC
SUPPLIER RL Supplies
01923 896996

DETAILS www.rlsupplies.co.uk
✓ Fast in 3D, including DirectX 10; SLI motherboard ✗ Monitor could use more contrast
FULL REVIEW Sep 2007

COMPUTER SHOPPER	201
Multitasking	206
Prey	79.0fps
Call of Duty 2	59.3fps

-50% Core 2 Duo E6300 +50% +100%

the highest scores in our Prey and Call of Duty 2 benchmarks in our recent group test of gaming PCs. With a fast Core 2 Duo E4400 processor and 2GB of RAM, the Modula is great for other intensive tasks, such as video editing, too.

With a large monitor, great speakers, a fast graphics card and a sensible keyboard and mouse, the Modula is a great gaming PC.

BYTE SIZE

PARROT Parrot Party

★★★
£79 inc VAT



The Parrot Party is a portable Bluetooth speaker with a rechargeable battery. It is compact, and can be powered from the mains by its charger. It has a normal line-in for non-Bluetooth audio sources.

We connected it to various devices, including Bluetooth-enabled MP3 players and phones, and a PC with a USB Bluetooth dongle. It played clearly at a range of 10m from the music's source. We paired several devices with the Parrot Party simultaneously, but it didn't always detect which one was streaming music.

Sadly, the speakers don't have much bass power and the sound is generally fuzzy. With its high cost, it's a difficult product to recommend.

Kat Orphanides

SUPPLIER www.parrotshopping.com
DETAILS www.parrot.com

OVERBOARD Pro-Sports Waterproof MP3 Case

★★★★
£40 inc VAT



The Pro-Sports Waterproof MP3 Case and 100% Waterproof Headphones bundle lets you keep your player dry and listen to it underwater, but the set isn't very comfortable.

The headphones don't have clips to hold them in position, and shifted while we were swimming, making the sound quieter. There was also a slight echo when used on dry land.

You can control the player through the plastic window in the front of the case, but it we found it hard to press some keys accurately. A neoprene strap holds the case to your arm, and it's designed to float to the surface if it is detached.

Unless you absolutely must listen to music underwater, this is an expensive purchase.

Kat Orphanides

SUPPLIER www.over-board.co.uk
DETAILS www.over-board.co.uk

CHOOSING A... Notebook Computer

Follow the steps to find your ideal specs

PROCESSOR: 1.6GHz Intel Celeron M 420
MEMORY: 512MB DDR
HARD DISK: 60GB
STORAGE: DVD rewriter
GRAPHICS: Integrated (shares system memory)
SCREEN: 15.4in widescreen 1,280x800 LCD
EXTRAS: Wireless networking
CONNECTORS: Three USB2, memory card reader
SOFTWARE: Windows Vista Home Premium
WEIGHT: 3kg
Recommended minimum in grey

1 The minimum specification of notebook we recommend, shown above in grey, is a good starting point when working out your ideal system. This is an average notebook that should cost around £600. It is not particularly powerful or, at 3kg, particularly portable.

2 Dual-core processors, such as Intel's Core 2 Duo range, can be much faster at many tough tasks. This is dependent on software support, but a lot of applications have now been optimised. Dual-core processors are widely available and often cost only a little more than their single-core equivalents.

3 Most notebooks come with 15.4in 1,280x800 widescreen displays, which are great for watching DVDs or TV. If you want a notebook for use around the home, especially for entertainment purposes, it's worth considering one with a larger 17in display. This will also have a higher native resolution of at least 1,440x900, giving you a bigger desktop. This makes it far easier to use complex applications, such as photo- or video-editing software.

4 A modem, 10/100 Ethernet port and wireless 802.11b/g networking (WiFi) should be fitted as standard, but there are also some other ports and connectors that you might want. FireWire (IEEE 1394) is common and useful for digital video enthusiasts. Bluetooth is handy for connecting to a mobile phone, but it's usually fitted only to more expensive business notebooks. Memory card readers are pretty much standard, but check that your camera or MP3 player's format is supported.

5 If portability is your main priority, look for a notebook with a 12.1in display.

Spending around £1,000 will get you an ultra-portable notebook that weighs under 2kg. Most of these notebooks are just as powerful as their larger counterparts, though some use slower, ultra-low voltage (ULV) processors to further increase battery life.

6 Some ultra-portables can attach to an optional docking station, which incorporates drives, ports and power, when you get home to your desk. It's the best of both worlds, but tends to be expensive. Others have separate DVD drives, or no optical drive at all, to help keep size and weight to a minimum.

7 If you're not swayed by ultra-portable chic, you can get a lot more for your money. Entertainment notebooks pile on the features but still keep the price under £1,200. You should expect a 17in widescreen display, hybrid TV tuner and a remote control.

8 There are features you can add to a notebook without increasing the weight or reducing battery life. A 120GB or 160GB hard disk will give you much more storage space, while 1GB of RAM will help you speed through tougher tasks. DVD rewriter drives are standard and will allow you to burn CDs and DVDs on your notebook.

9 Dedicated graphics let you play modern 3D games and are increasingly common on all but the cheapest or lightest notebooks. Look for an ATI Radeon Mobility X1600 or Nvidia GeForce Go 7600 chip as a minimum for getting smooth frame rates on the latest titles. Many notebooks use integrated graphics, which are fine for all other purposes, but use up system memory.

10 Once you're happy with your specification, start to shortlist some models you can afford. Check the weight, display size and battery life of each of them. If these are not acceptable, you need to reconsider your priorities and which features you really need.

